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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/574,238	03/30/2006	Nobuo Tomizawa	MITSDA.001AUS	5894

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EXAMINER

HO, HA DINH

ART UNIT	PAPER NUMBER
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3681

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/574,238	Applicant(s) TOMIZAWA, NOBUO	
	Examiner HA D. HO	Art Unit 3681	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>5/3/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This is the first Office Action on the merits of Application No. 10/574,238 filed on 03/30/06. Claims 1-3 are currently pending.

Specification

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

3. The abstract of the disclosure is objected to because it has more than one paragraph.

Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 2 and 3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The following limitations lack antecedent basis:

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- “the intermediary transfer wheel” in claim 2, line 2,
- “the support shaft” in claim 2, line 3,
- “the intermediary transfer wheel” in claim 2, line 8,
- “the support shaft” in claim 3, line 2,
- “the first turning transmission wheel” in claim 3, lines 3-4,
- “the second turning transmission wheel” in claim 3, lines 4-5,
- “the intermediary transfer wheel” in claim 3, line 5,
- “the first turning transmission wheel” in claim 3, line 6,
- “the second turning transmission wheel” in claim 3, lines 6-7,
- “the support shaft” in claim 3, line 7,
- “the intermediary transfer wheel” in claim 3, line 8,
- “the first turning transmission wheel” in claim 3, line 9,
- “the second turning transmission wheel” in claim 3, line 10, and
- “the support shaft” in claim 3, line 10.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Walter (US 2,875,628).

Walter teaches a transmission having a first rotation shaft 3 coaxially fixed to a first turning transmission wheel (i.e., the wheel opposite to the wheel 6) and a second rotation shaft 4 coaxially fixed to a second turning transmission wheel 6 which are arranged in parallel with each other, a support shaft 20 extended between the first turning transmission wheel and the second turning transmission wheel, an intermediary transfer wheel 5 formed on the support shaft rotatably and movably along a longitudinal direction of the support shaft, wherein the first rotation shaft is rotated by a power device (see col. 1, line 27), and a rotational force of which can be transmitted to the second rotation shaft with variable speed, the transmission characterized in that: each of the first turning transmission wheel and the second turning transmission wheel is formed in a shape of a right circular cone or a right circular cone trapezoid and has an identical vertex angle, and a tapered side peripheral surface of each of the first turning transmission wheel and the second turning transmission wheel faces each other with a constant distance; the support shaft is arranged between the side peripheral surface of the first turning transmission wheel and the side peripheral surface of the second turning transmission wheel such that it extends in the longitudinal direction along the side peripheral surface of the first turning transmission wheel and the side peripheral surface of the second turning transmission wheel; and the intermediary transfer wheel 5 contacts with each of the side peripheral surface of the first turning transmission wheel and the side peripheral surface of the second turning transmission wheel and is moveable in the longitudinal direction along the support shaft while maintaining the contact (note the moveable of the transfer wheel 5 in the longitudinal direction along the support shaft is defined in the range where the transfer wheel 5 is still in contact with the wheel 6 and the opposite wheel on the shaft 3).

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8. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by the JP 49-70378 to Yukio. This reference is cited in IDS submitted 05/03/06.

Yukio teaches a transmission having a first rotation shaft 2 coaxially fixed to a first turning transmission wheel 4 and a second rotation shaft 5 coaxially fixed to a second turning transmission wheel 5 which are arranged in parallel with each other, a support shaft 6 extended between the first turning transmission wheel and the second turning transmission wheel, an intermediary transfer wheel 9 formed on the support shaft rotatably and movably along a longitudinal direction of the support shaft, wherein the first rotation shaft is rotated by a power device (inherent), and a rotational force of which can be transmitted to the second rotation shaft with variable speed, the transmission characterized in that: each of the first turning transmission wheel and the second turning transmission wheel is formed in a shape of a right circular cone or a right circular cone trapezoid and has an identical vertex angle, and a tapered side peripheral surface of each of the first turning transmission wheel and the second turning transmission wheel faces each other with a constant distance; the support shaft is arranged between the side peripheral surface of the first turning transmission wheel and the side peripheral surface of the second turning transmission wheel such that it extends in the longitudinal direction along the side peripheral surface of the first turning transmission wheel and the side peripheral surface of the second turning transmission wheel; and the intermediary transfer wheel 9 contacts with each of the side peripheral surface of the first turning transmission wheel and the side peripheral surface of the second turning transmission wheel and is moveable in the longitudinal direction along the support shaft while maintaining the contact.

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9. Claim 2 is rejected under 35 U.S.C. 102(b) as being anticipated by Voelkl (US 2,936,641).

Voelkl teaches a transmission characterized in that: an intermediary transfer wheel 19 is movable in the longitudinal direction along a support shaft 16 by means of an intermediary transfer wheel feeding device that has a moving arm 18, a drive mechanism 21 that drives the moving arm in the longitudinal direction along the support shaft, and a feeding member 17 provided at an end of the moving arm 18 that moves the intermediary transfer wheel 19 in the longitudinal direction along the support shaft 16.

10. Claim 3 is rejected under 35 U.S.C. 102(b) as being anticipated by Gallup (US 295,536).

Gallup teaches a transmission characterized in that: a support shaft (the shaft of the pinion (I), see page 2, lines 22-23) is moveable by a reciprocal movement mechanism to locations close to or away from a first turning transmission wheel (D) and a second turning transmission wheel (E); an intermediary transfer wheel (I) contacts with the first turning transmission wheel (D) and the second turning transmission wheel (E) when the support shaft is located at the close location (when the pinion I engages to both gears D and E), and the intermediary transfer wheel (I) is separated from the first turning transmission wheel (D) and the second turning transmission wheel (E) when the support shaft is located at the away location (when the pinion I does not engage to gears D and E).

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Cited Prior Art

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure (see the attached form PTO-892).

Communication

12. Submission of your response by facsimile transmission is encouraged. The fax phone numbers for the organization where this application or proceeding is assigned are **(571) 273-8300**. Recognizing the fact that reducing cycle time in the processing and examination of patent applications will effectively increase a patent's term, it is to your benefit to submit responses by facsimile transmission whenever permissible. Such submission will place the response directly in our examining group's hands and will eliminate Post Office processing and delivery time as well as the PTO's mail room processing and delivery time. For a complete list of correspondence not permitted by facsimile transmission, see M.P.E.P. 502.01. In general, most responses and/or amendments not requiring a fee, as well as those requiring a fee but charging such fee to a deposit account, can be submitted by facsimile transmission. Responses requiring a fee which applicant is paying by check should not be submitting by facsimile transmission separately from the check. Responses submitted by facsimile transmission should include a Certificate of Transmission (M.P.E.P.. 512). The following is an example of the format the certification might take:

I hereby certify that this correspondence is being facsimile transmitted to
the Patent and Trademark Office on _____
(Date)

Typed or printed name of person signing this certificate:

(Signature)

If your response is submitted by facsimile transmission, you are hereby reminded that the original should be retained as evidence of authenticity (37 CFR 1.4 and M.P.E.P.. 502.02). Please do not separately mail the original or another copy unless required by the Patent and Trademark Office. Submission of the original response or a follow-up copy of the response after your response has been transmitted by facsimile will only cause further unnecessary delays in the processing of your application; duplicate responses where fees are charged to a deposit account may result in those fees being charged twice.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ha D. Ho whose telephone number is **571-272-7091**. If attempts

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to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor can be reached on **571-272-7095**.

13. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/HDH/
(571) 272-7091
May 5, 2008

/Ha D. Ho/
Primary Examiner, A.U. 3681